

PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION.

Improvements in or relating to Alarm Clocks.

I, CARL SCHATZ, a British subject, of 40, Caversham Avenue, Palmers Green, N. 13, do hereby declare the nature of this invention to be as follows:—

5 This invention relates to alarm clocks and more especially to the control means provided enabling the alarm mechanism to be rendered operative or inoperative at will. The object of the present invention is to provide improved control means 10 having associated therewith indicating means adapted to show clearly at the clock face whether the control means is set for permitting or preventing operation of the alarm mechanism. 15

According to this invention the alarm control means carries or is operatively connected with an indicating device movable within the clock case said device being adapted to give visible indications of the position in which the control means is set. 20

In one way of carrying the invention into practical effect the alarm control device comprises a lever pivoted upon the clock case or on the frame of the clock movement said lever having a projection adapted when the lever is in one extreme position to contact with some part of the alarm mechanism and thus prevent its movement. This lever protrudes through 25 the clock case at any suitable point and is there provided with a knob or handle for its manipulation and the pivot of the lever is preferably arranged in proximity to the

handle in order that small movements 35 only need be applied to said handle in manipulating the lever.

The indicating device comprises a sector-like extension of the lever arranged to swing when the lever is manipulated in a plane parallel with and just behind the clock dial, the sector bearing on its front face suitable inscriptions such for example as "Alarm" and "Silent" one or other of which is made visible according to the position of the lever by coming into register with an aperture or window in the dial. To enable the inscriptions to be made large and clearly legible the sector-like extension is made of greater length 40 than the handle portion of the lever. Thus the pivotal centre of the lever and the window or aperture through which the indications show may conveniently be on opposite sides or above and below the centre of the dial, the sector-like extension of the lever being slotted or cut away where necessary to clear the arbors which pass through the dial. 45

As will be understood the control means 50 may in some cases consist of a sliding member carrying or operatively connected with an indicating device co-operating with a window or aperture in the dial. 55

Dated this 4th day of April, 1928.

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COMPLETE SPECIFICATION.

Improvements in or relating to Alarm Clocks.

65 I, CARL SCHATZ, British Subject, of 40, Caversham Avenue, Palmers Green, London, N. 13, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

70 This invention relates to alarm clocks having control means enabling the alarm mechanism to be rendered operative or inoperative at will and more especially to such control means of the kind carrying or operatively connected with an indicating 75

[Price 1/-]

device movable within the clock case, said device being adapted to give visible indications of the position in which the control means is set through an aperture or window in the clock dial. 80

An arrangement of this kind is known wherein a pivoted lever, actuated independently of the alarm control mechanism in order to indicate through an aperture in the dial whether the alarm had been set to operate at A.M. or P.M., had a third position in which it rendered the alarm inoperative and indicated this fact through 85 90

Price 75p

the aperture in the dial. Indicators of another type, which are automatically operated from the alarm mechanism but are not connected with the alarm control means, have been proposed comprising either a rotatable disc operated to one position by said mechanism and manually re-set to the other position or a pivoted lever operated by the alarm mechanism to each of its indicating positions.

According to this invention an alarm control means of the kind set forth comprises a pivoted lever actuated from the exterior of the clock case to release, check or otherwise control the alarm mechanism, said lever carrying visible indications corresponding to the respective positions of the control means.

In order that the invention may readily be understood the preferred way of carrying same into practical effect will now be described, reference being made to the accompanying drawings, wherein:—

Fig. 1 is a front elevation of an alarm clock provided with the alarm control means according to this invention, part of the clock face and casing being shown broken away,

Fig. 2 is a fragmentary rear elevation of the clock movement partly in section, the major portion of said movement together with part of its frame being supposed removed, and

Fig. 3 is a side elevation of Fig. 2, partly in section.

As shown the alarm control device comprises a lever *a* pivoted as at *b*, preferably on the usual metal frame (not shown) which supports the clock movement *c* within the clock case *d* and carries on its front surface the dial *e*.

Said lever *a* which works in a plane parallel with and just behind the clock dial *e* has a rearwardly bent portion or tongue forming a projection *f* adapted when the lever is in one extreme position to contact with some part of the alarm mechanism (partly shown in Figs. 2 and 3) in order to prevent its movement.

In the position of the parts as shown on the drawings the projection *f* is in engagement with a stiff wire member *g* secured to the rocking arbor *h* carrying the pallets *i* and hammer *j* of the alarm mechanism. Said wire *g* is bent in the manner illustrated so that the projection *f* has a wedging engagement therewith when in the position shown, but is free thereof when the lever *a* carrying said projection is moved to its other extreme position.

The engagement of the projection *f* with the wire *g* effectively prevents movement of the rocking arbor *h*, under the action of the driving gear train *k*, should the alarm mechanism be released by the ordinary

mechanism (not shown) actuated by the clock movement.

At its upper end the lever *a* protrudes through a slot in the clock case *d* and is there provided with a knob or handle *l* for its manipulation, the pivot *b* of the lever being arranged in proximity to the handle in order that small movements only need be applied to said handle in manipulating the lever.

The indicating device comprises a sector-like extension *a'* of the lever *a* arranged to swing when the lever is manipulated in a plane parallel with and just behind the clock dial *e*, the sector bearing on its front face suitable inscriptions *m* such for example as "Alarm" and "Silent" one or other of which is made visible from the front of the clock according to the position of the lever *a* by coming into register with an aperture or window *n* in the dial *e*.

To enable the inscriptions *m* to be made large and clearly legible the sector-like extension *a'* is made of greater length than the handle portion of the lever *a* and thus the pivotal centre of the lever and the window or aperture *n* may conveniently be above and below the centre of the dial, the sector-like extension *a'* being slotted or cut away where necessary, as indicated at *o*, to clear the arbors which pass through the dial *e*.

Convenient means for securing the inscriptions *m* on the lower portion of the sector-like extension *a'* comprise tongues *p*, pressed out from the material of the sector, beneath which the card or the like carrying the inscriptions may be inserted prior to the partial pressing of the tongues *p* back into the sector to grip the said card or the like.

The movement of the sector and hence of the lever *a* may be limited in any desired manner to ensure that an inscription *m* will register with the window or aperture *n* when the lever is in one or other of its extreme positions. Such limitation may be brought about by appropriately dimensioning the slot in the clock case through which the upper end of the lever *a* protrudes, but in the construction shown the sector *a'* is adapted to abut against one or other of the uppermost pair of the usual rearwardly bent lugs on the metal frame (not shown) carrying the dial *e* which serve to support the clock movement. Said lugs are indicated in Fig. 1 at *q*, *q*.

In the construction of alarm clock illustrated in the drawings the hammer *j* is adapted, when released, to strike against a boss or projection on the inner face of the rear cover-plate of the clock casing, but it will be understood that the

present invention is applicable to all types of alarm clocks in which control means are provided for the alarm mechanism.

Furthermore, in some alarm clocks which are adapted to give a repeat or intermittent alarm, the indications given at the clock face may comprise "Silent" and "Repeat" whilst in other alarm clocks, adapted to give both repeat and continuous alarms, the indications may comprise "Silent", "Repeat" and "Long Alarm", each indication being adapted to show at the clock face for the appropriate position of the alarm control device.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An alarm clock wherein the alarm control means is of the kind set forth and comprises a pivoted lever actuated from the exterior of the clock case to release, check or otherwise control the alarm mechanism, said lever carrying visible indications corresponding to the respective positions of the control means.

2. An alarm clock according to claim 1, wherein the lever works in a plane parallel with and just behind the clock dial and has a rearward projection adapted, when the lever is in one extreme

position, to contact with some part of the alarm mechanism in order to prevent movement of the latter.

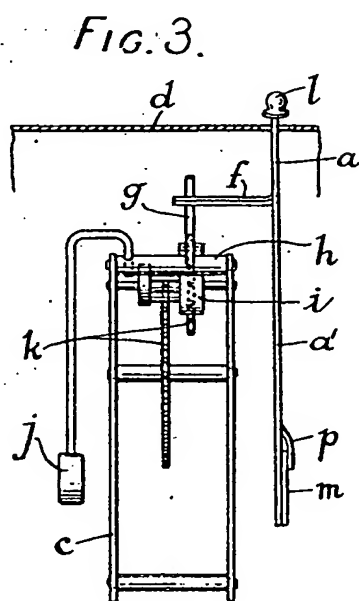
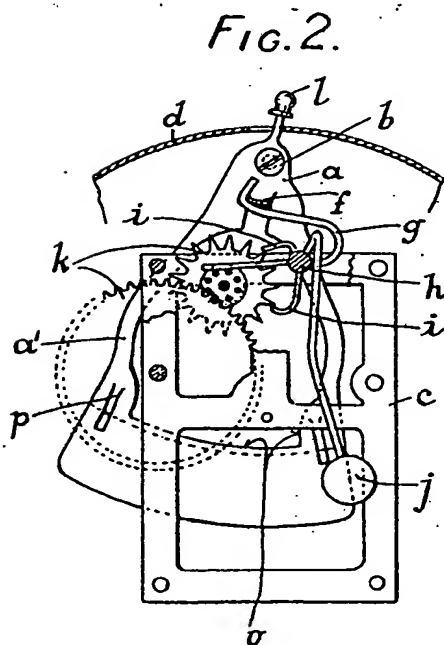
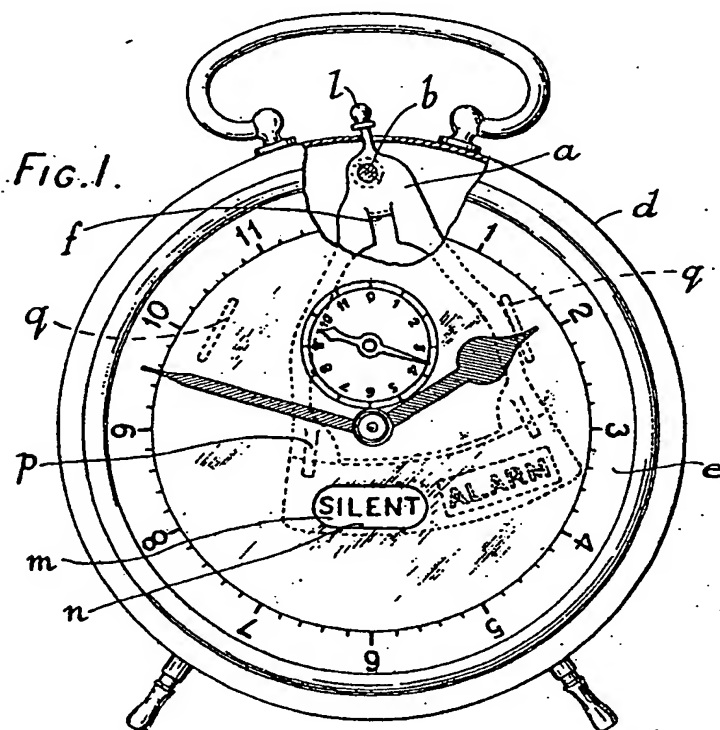
3. An alarm clock according to claim 1 or 2, wherein the upper end of the lever protrudes through a slot in the clock case and is there provided with a knob or handle for its manipulation, the pivot of the lever being arranged in proximity to the handle in order that small movements only need be applied to the latter in manipulating the lever.

4. An alarm clock according to claim 3, wherein the indications are carried on a sector-like extension of the lever which is of greater length than the handle portion of the lever, the pivotal centre of the lever and the window or aperture through which the indications are visible being respectively above and below the centre of the dial.

5. An alarm clock according to any of the preceding claims, wherein the portion of the lever within the clock case is slotted or apertured to clear the arbors which pass through the clock dial.

6. The improved alarm clock substantially as herein described with reference to the accompanying drawings.

Dated this 29th day of October, 1928.
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[This Drawing is a reproduction of the Original on a reduced scale.]